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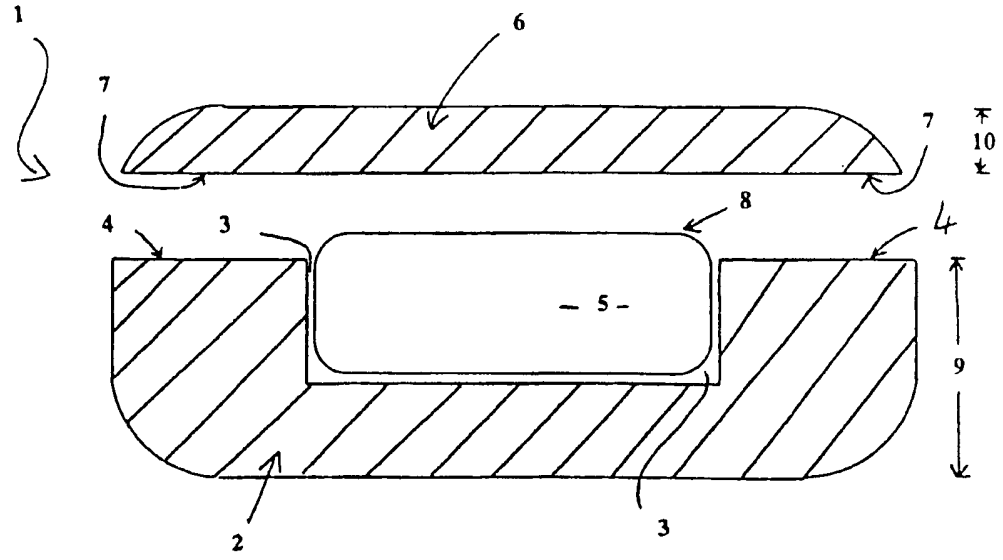

(57) Abstract

This invention relates to a soap and sponge combination (1). The soap and sponge combination comprises a first sponge portion (2) with a cavity (3) cut or formed in one face (4) thereof. The cavity (3) is adapted or able to receive and/or retain a bar of soap (5) therein. There is also provided a second complimentary sponge portion (6) having a substantially planar face (7) which can be secured to the face (4) of the first sponge portion (2). Securing the second sponge portion (6) to the first sponge portion (2) has the effect of capping the cavity (3) and encapsulating the bar of soap (5) within the cavity (3), and thus forming the soap and sponge combination (1). There is also described methods for making a soap and sponge combination (1).

A Soap and Sponge Combination

TECHNICAL FIELD

This invention relates to a soap and sponge combination. For convenience only, the soap shall be predominantly described herein as a bar or cake of soap, however it is to be understood that other types of soap or detergents, either in solid or liquid form, may be utilised as required or as desired.

BACKGROUND ART

Soap and sponge combinations used as cleansing devices are known.

French Patent No. 1146944 describes a soap and sponge combination which comprises a whole sponge provided with a cavity for receiving and retaining a bar of soap therein. There is also provided a slit in the side of the sponge for inserting a bar of soap therethrough and into the cavity.

French Patent No. 2353205 describes a soap and sponge combination wherein a bar of soap may either be fully enclosed within a cavity formed in a sponge, or alternatively may rest partially within a cavity in a sponge, leaving a portion of the bar of soap showing through the top of the sponge.

French Patent No. 1118205 describes a soap and sponge combination wherein a bar of soap is encapsulated between two equal halves of a sponge.

US Patent No. 3,488,126 describes a soap and sponge combination wherein a bar of soap is encapsulated within a sponge, and wherein the sponge is provided with a resilient means (that is a handle) to be

engageable by the hand of a user of the soap and sponge combination.

All of the above patents describe soap and sponge combinations wherein a bar of soap is either encapsulated within a whole sponge portion, or alternatively between two substantially equal portions of sponge material. There is no disclosure in the prior art of a soap and sponge combination which comprises or consists of a bar of soap encapsulated between two substantially unequal sponge portions, with the larger sponge portion being provided with a cavity to receive and/or retain a bar of soap therein and the smaller sponge portion being adapted to encapsulate or cap the soap within the larger sponge portion. We believe there are advantages associated with such a soap and sponge combination, and also advantages associated with the manufacture thereof, as described hereinafter.

It is an object of the present invention to provide an improved soap and sponge combination.

It is a further object of the present invention to provide an improved method for manufacturing a soap and sponge combination.

Further aspects and advantages of the present invention will become apparent from the ensuing description which is given by way of example only.

DISCLOSURE OF INVENTION

According to one aspect of the present invention there is provided a soap and sponge combination comprising:

a) a first sponge portion, said first sponge portion having a cavity of predetermined depth and size formed in one face thereof, said cavity

being adapted or able to receive and/or retain a bar of soap therein,

b) a second complimentary sponge portion, said second sponge portion having a substantially planer face which may be secured to said face of said first sponge portion to cap said cavity and/or encapsulate a bar of soap within said cavity.

According to another aspect of the present invention there is provided a soap and sponge combination substantially as described above wherein said first sponge portion is of substantially greater thickness and/or volume than said second sponge portion.

According to another aspect of the present invention there is provided a soap and sponge combination substantially as described above wherein said substantially planer face of said second sponge portion abuts a bar of soap accommodated within said cavity of said first sponge portion, when said second sponge portion is secured thereto.

According to another aspect of the present invention there is provided a soap and sponge combination substantially as described above wherein said second sponge portion is releasably securable to said face of said first sponge portion, whereby a bar of soap accommodated within said cavity or soap and sponge combination may be accessible and/or removable therefrom and/or replaceable.

According to a further aspect of the present invention there is provided a method of manufacturing a soap and sponge combination substantially as described above comprising the steps of:

a) forming said first and second sponge portions,

b) placing a bar of soap of appropriate size in the cavity of said first sponge portion,

c) capping said first portion to encapsulate the bar of soap within said cavity of said first portion by securing the substantially planer face of said second sponge portion to the face of said first sponge portion.

According to a further aspect of the present invention there is provided a method substantially as described above wherein said first and second sponge portions are formed from a common sponge.

The first sponge portion may be of any size, shape or configuration as required or as desired or as dictated by the size, shape or configuration of the bar of soap to be accommodated therein or thereon and/or the size, shape or configuration of the second sponge portion.

The first sponge portion may preferably be provided with a cavity of predetermined depth and/or size cut or formed in one face therein or thereon, the cavity being adapted or able to receive and/or retain a bar of soap therein.

The cavity may be of any size, shape, depth or configuration as required or as desired, or as dictated by the size, shape or configuration of the bar of soap it is to accommodate.

Preferably, the cavity may be of substantially the same depth and/or size as the bar of soap it is to accommodate. Alternatively, the cavity may be smaller or larger than the bar of soap it is to accommodate. If the cavity is smaller than the bar of soap it is to accommodate, then preferably it shall be only slightly smaller whereby a snug fit of the bar of soap within the cavity results, and especially when the second sponge portion is secured to the first sponge portion as described below.

The second sponge portion may preferably be provided with a

substantially planer face which may be secured to the face of the first sponge portion having the cavity cut or formed therein. The second sponge portion may be adapted to cap the cavity within the first sponge portion and/or encapsulate a bar of soap within the cavity.

Preferably, the substantially planer face of the second sponge portion may be of approximately the same size, shape or configuration as the face of the first sponge portion in which the cavity is cut or formed.

The second sponge portion may be of any size, shape or configuration as required or as desired, or as dictated by the size, shape or configuration of the first sponge portion and/or bar of soap to be encapsulated within the soap and sponge combination.

Preferably, the second sponge portion may be in the form of a substantially thin, planer and/or flat lid-type portion. Alternatively, the second sponge portion may be formed in a particular shape or configuration which may attract certain buyers. For example, the second sponge portion may be in the form of a train, duck, tug boat, and so on for attracting the interest of children, and/or to be aesthetically pleasing to potential users or buyers of the soap and sponge combination. In any such shaped embodiments, the second sponge portion should still be provided with a substantially planer face or surface, as described above, for securement thereof to the first sponge portion and/or bar of soap within the cavity of same.

Preferably, the first sponge portion may be of substantially greater volume, size and/or area than the second sponge portion.

In a preferred embodiment, the first sponge portion and the cavity cut or formed within same should accommodate a bar of soap whereby the top

surface of the bar of soap lies substantially flush with the face, or just above the face, of the first sponge portion into which the cavity is cut or formed. In such an embodiment, the substantially planer face of the second sponge portion will abut the bar of soap contained within the cavity of the first sponge portion.

It may be preferable to have the cavity cut or formed within the first sponge portion slightly smaller than the size or dimensions of the bar of soap to be received and/or retained therein since this results in a particularly snug fit of the bar of soap within the cavity or soap and sponge combination when the second sponge portion is secured to the first sponge portion. In such an embodiment, movement of the bar of soap within the soap and sponge combination is minimised until, of course, the bar of soap has significantly reduced in volume due to use.

Since sponge material is generally somewhat flexibleore maleable, the first and second sponge portions will bend or form around or about the bar of soap even if the bar of soap is slightly larger than the cavity in which it is accommodated.

Preferably, the substantially planer face of the second sponge portion may be adhered to the face of the first sponge portion. Any suitable adhesive may be utilised as required or as desired.

Alternatively, the first and second sponge portions may be releasably securable with respect to each other. Any suitable releasably securing means may be utilised as required or as desired. For example, and preferably, the first and second sponge portions may be releasably secured to each other by the use of "VELCRO" brand fastening strips.

We believe there are manufacturing advantages associated with the first

sponge portion being substantially larger than the second sponge portion.

Any suitable method or methods for manufacturing the soap and sponge combination, substantially as described herein, may be utilised as appropriate.

One possible method of forming the soap and sponge combination may utilise the bringing together of first and second sponge portions formed separately or independently to each other. The first sponge portion may have a cavity cut or formed therein by any suitable cutting or scooping means; a bar of soap of appropriate size and/or depth may then be placed within the cavity, and the second sponge portion subsequently adhered or releasably secured to the face of the first sponge portion. Such a manufacturing method may be conducted manually by workers, or alternatively and preferably may be automated in a suitable production line.

Another method of manufacture of the soap and sponge combination substantially as described herein may utilise a common sponge from which may be formed or produced the first and second sponge portions. This may be accomplished by cutting the common sponge with suitable cutting means to produce or form the first sponge portion into which the cavity is to be cut or formed, and the second sponge portion which should have one substantially planer face for securement to the first sponge portion. Preferably, the common sponge may be cut whereby the first sponge portion comprises a substantially larger area or volume than the second sponge portion. For example, the second sponge portion may comprise approximately 20% of the original common sponge volume or area, and the first sponge portion may comprise the remaining 80%.

The first sponge portion may then have a suitable cavity cut or formed therein by any suitable cutting or scooping means; a bar of soap of appropriate or desired size or shape may be placed within the cavity, and the second sponge portion may thereafter be secured to same.

Again, such a method of manufacture may be done manually be workers, or alternatively and preferably, automated in a suitable or appropriate production line.

BRIEF DESCRIPTION OF DRAWINGS

Further aspects of the present invention will become apparent from the ensuing description which is given by way of example only and with reference to the accompanying drawings in which:

Figure 1: is an exploded cross-sectional view of one possible embodiment of the present invention, and

Figure 2: is a top view of the embodiment shown in Figure 1 without the lid portion, and

Figure 3: is a schematic diagram depicting one possible method of manufacturing the soap and sponge combination illustrated in Figures 1 and 2.

BEST MODES FOR CARRYING OUT THE INVENTION

Having regard to Figure 1 there is showing a soap and sponge combination generally indicated by arrow 1.

The soap and sponge combination 1 comprises a first sponge portion 2 with a cavity 3 cut or formed in one face 4 thereof. The cavity 3 is adapted or able to receive and/or retain a bar of soap 5 therein.

There is also provided a second complim ntary sponge portion 6 having a substantially planer face 7 which can be secured to the face 4 of the first sponge portion 2.

Securing the second sponge portion 6 to the first sponge portion 2 has the effect of capping the cavity 3 and encapsulating the bar of soap 5 within the cavity 3.

In the embodiment shown, the cavity 3 is of substantially the same length and width as the bar of soap 5, however the depth of the cavity 3 is slightly less than the depth of the bar of soap 5, whereby the top surface 8 of the bar of soap 5 lies just above the surface of the face 4 of the first sponge portion 2.

The first sponge portion 2 is significantly larger than the second sponge portion 6. Having regard to Figure 1, the depth 9 of the first sponge portion 2 is approximately 50mm, and the depth 10 of the second sponge portion 6 is approximately 10mm.

It may also be seen from Figure 1 that the face 7 of the second sponge portion 6 abuts the upper surface 8 of the bar of soap 5 when secured to the face 4 of the first sponge portion 2. It may be appreciated therefore that the bar of soap 5 is securely and snugly retained within the cavity 3 and/or the soap and sponge combination 1.

The second sponge portion 6 is glued to the face 4 of the first sponge portion 2, the glue being applied around the periphery of the first and second sponge portions 2,6. There are many adhesives available which may be utilised for gluing sponge together, and any such suitable adhesive may be utilised.

An advantage associated with the present invention over and above the prior art known is that the invention comprises a larger first sponge portion 2 into which the cavity 3 is formed, which cavity 3 may be utilised for accommodating a bar of soap 5. The second sponge portion 6 which is preferably in the form of a substantially flat lid portion as shown, may be easily formed and readily secured to the first sponge portion 2.

Forming the cavities within the sponges of the prior art known, and as described previously, may be difficult, fiddly and/or time consuming, and may require the use of complex and/or costly machinery and/or production lines.

Furthermore, our invention only requires the forming of one cavity 3 in one sponge portion 2, as compared to forming cavities in both sponge portions, and as described in French Patent No. 1118205.

The method of forming the soap and sponge combination 1 as depicted in Figures 1 and 2 is illustrated schematically in Figure 3.

In Figure 3 a common sponge 11 enters a cutting station 12 where it is cut by suitable cutting means to form the first sponge portion 2 and the second sponge portion 6. The first sponge portion 6 then enters a cavity forming station 13 where the cavity 3 is cut or formed therein by suitable cutting or scooping apparatus or means.

The first sponge portion 2 with the cavity 3 cut or formed therein, then passes through a soap placement station 14 where a bar of soap 5 is placed within the cavity 3, before being reunited with the second sponge portion 6.

At this time, the first and second sponge portions 2,6 pass through a

joining station 15 where they are adhered to each other around their peripheral portions or regions thereof.

The method as described above may be performed manually by workers, or alternatively automated on a suitable production line.

Aspects of the present invention have been described by way of example only and it should be appreciated that modifications and additions may be made thereto without departing from the scope thereof, as defined in the appended claims.

THE CLAIMS DEFINING THE INVENTION ARE:

1. A soap and sponge combination comprising:
   a) a first sponge portion, said first sponge portion having a cavity of predetermined depth and size formed in one face thereof, said cavity being adapted or able to receive and/or retain a bar of soap therein,
   b) a second complimentary sponge portion, said second sponge portion having a substantially planer face which may be secured to said face of said first sponge portion to cap said cavity within same and/or encapsulate a bar of soap within said cavity.

2. A soap and sponge combination as claimed in claim 1 wherein said first sponge portion is of substantially greater thickness and/or volume than said second sponge portion.

3. A soap and sponge combination as claimed in claim 1 or claim 2 wherein said substantially planer face of said second sponge portion abuts a bar of soap accommodated within said cavity of said first sponge portion, when said second sponge portion is secured thereto.

4. A soap and sponge combination as claimed in any one of claims 1 to 3 wherein said second sponge portion is releasably securable to said face of said first sponge portion, whereby a bar of soap accommodated within said cavity or soap and sponge combination may be accessible and/or removable therefrom and/or replaceable.

5. A soap and sponge combination as claimed in any one of claims 1 to 4 wherein said cavity is of substantially the same depth and/or size

as the bar of soap it accommodates.

6. A soap and sponge combination as claimed in any one of claims 1 to 4 wherein said cavity is smaller in depth and/or size than the bar of soap it accommodates.

7. A method of manufacturing a soap and sponge combination as claimed in any one of claims 1 to 6 comprising the steps of:
   a) forming said first and second sponge portions,
   b) placing a bar of soap of appropriate size in the cavity of said first sponge portion,
   c) capping said first portion to encapsulate the bar of soap within said cavity of said first portion by securing the substantially planer face of said second sponge portion to the face of said first sponge portion.

8. A method as claimed in claim 7 wherein said first and second sponge portions are formed from a common sponge.

9. A method as claimed in claim 8 wherein said first and second sponge portions are formed by:
   a) cutting said common sponge in an appropriate fashion to produce or form said first sponge portion (with no cavity) and said second sponge portion,
   b) forming a cavity within said first sponge portion.

10. A method as claimed in claim 8 or claim 9 wherein before said cavity is formed within said first sponge portion, said first sponge portion comprises approximately 60% to 90% of the area or volume of said original common sponge, and said second sponge portion comprises approximately 10% to 40% of the area or volume of said

original common sponge.

11. A soap and sponge combination substantially as described herein with reference to the accompanying drawings.

12. A method of manufacturing a soap and sponge combination substantially as described herein with reference to the accompanying drawings.

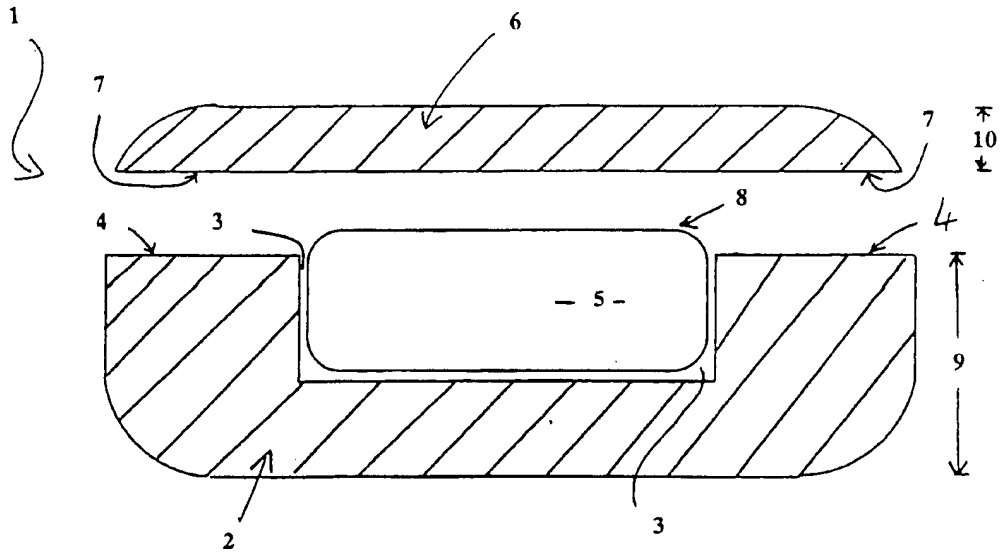

FIGURE 1

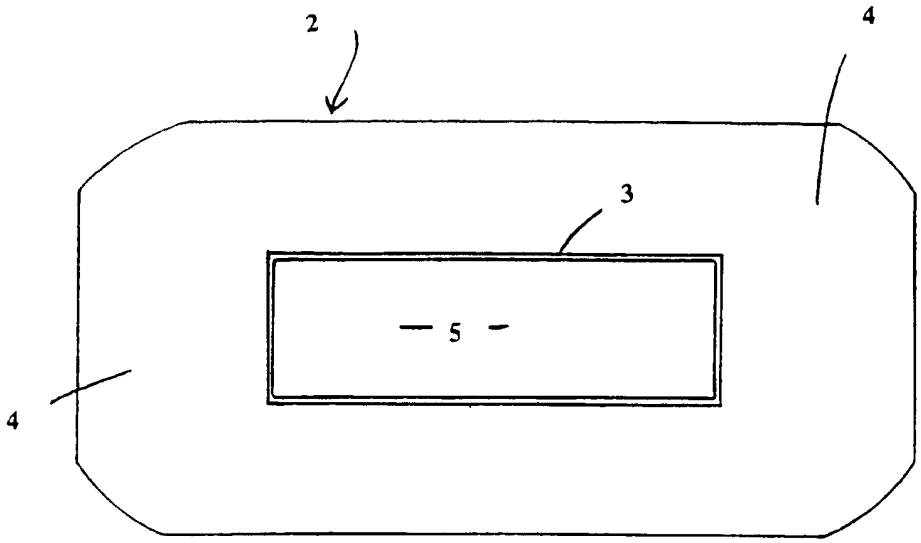

FIGURE 2

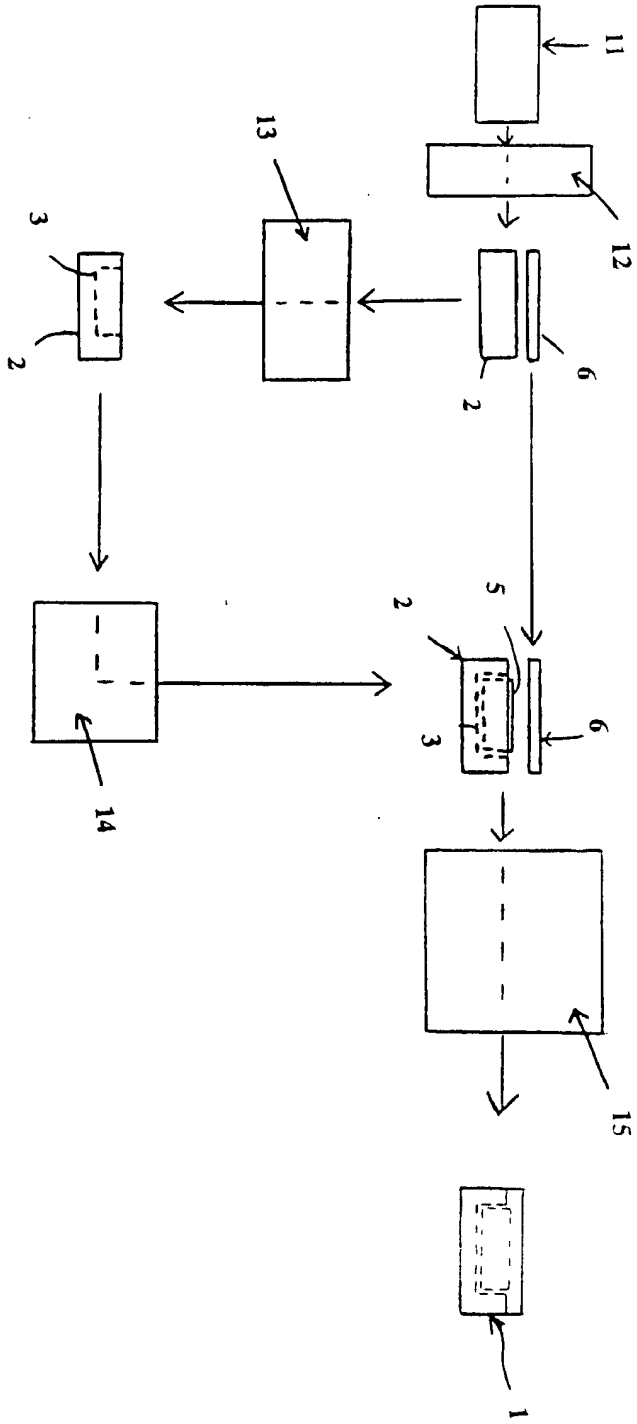

FIGURE 3

A. CLASSIFICATION OF SUBJECT MATTER
Int. Cl.[5] A47K 7/03

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC A47K 7/03

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
AU : IPC as above

Electronic data base consulted during the international search (name of data base, and where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to Claim No.
	FR,A, 1118205 (LAURO) 1 June 1956 (01.06.56)	
X	page 1 column 1 lines 25-44, page 1 column 2 line 25 to page 2 column 2 line 5 and fig. 2	1-9
Y	whole document	10
	GB,A, 849242 (DUPUY) 21 September 1960 (21.09.60)	
X	page 2 line 13 - page 3 line 39	1-9
Y	whole document	10
	GB,A, 899016 (GILLON) 20 June 1962 (20.06.62)	
X	page 1 line 51 - page 2 line 16 and figs 1 & 4	1-9
Y	whole document	10

[X] Further documents are listed in the continuation of Box C.

[ ] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
18 April 1994 (18.04.94)	21 April 1994 (21.04.94)

Name and mailing address of the ISA/AU	Authorized officer
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate of the relevant passages	Relevant to Claim No.
Y	US,A, 3488126 (AVALLONE) 6 January 1970 (06.01.70) whole document	1-10
Y	AU,B, 38330/78 (517271) (LANSBERGEN) 31 January 1980 (31.01.80) claims	1-10
Y	FR,A, 2599955 (MECANETUDE S.A.R.L.) 18 December 1987 (18.12.87) whole document	1-10
Y	FR,A, 2666498 (DYONNE) 13 March 1992 (13.03.92) whole document	1-10